U.S. Department of the Interior Bureau of Land Management Little Snake Field Office 455 Emerson Street Craig, CO 81625-1129

#### ENVIRONMENTAL ASSESSMENT

EA-NUMBER: DOI-BLM-CO-N010-2010-0005-EA

**PERMIT/LEASE NUMBER: N/A** 

**PROJECT NAME:** 7 Springs Hazardous Fuels Reduction

**LEGAL DESCRIPTION**: The project is located in all or a portion of the following sections:

T8NR102W Section 36, T8N R101W Section 31, T7NR102W Section 1, T7NR101W Section 6

**APPLICANT**: BLM

**PLAN CONFORMANCE REVIEW:** The proposed action is subject to the following plan:

Name of Plans: Little Snake Resource Management Plan and Record of Decision

Date(s) Approved: April 26, 1989

Results: The majority of the treatment area falls within Management Unit 5: Douglas Mountain identified in the Little Snake Resource Management Plan and Record of Decision. The management objectives for this unit are to manage the forest and woodland resources to produce a variety of forest and woodland products on a sustained-yield basis. The development of other resource uses/values within this unit is allowed consistent with the management objectives for forest and woodland resources. The proposed action has been reviewed for conformance with this plan (43 CFR 1610.5, BLM 1617.3). The proposed alternatives are in conformance with the objectives of the Little Snake Resource Management Plan.

A small portion of the treatment area falls within Management Unit 2: Northern Central, identified in the Little Snake Resource Management Plan and Record of Decision. The management objectives for this unit are to provide for the development of the oil and gas resource. The development of other resource uses/values within this unit is allowed consistent with the management objectives for oil, gas and forest resources. The proposed action has been reviewed for conformance with this plan (43 CFR 1610.5, BLM 1617.3). The proposed alternatives are in conformance with the objectives of the Little Snake Resource Management Plan.

**RELATIONSHIP TO STATUTES, REGULATIONS, OR OTHER PLANS:** The Proposed Action implements actions recommended in the National Fire Plan and the Little Snake Fire Management Plan. It is also consistent with the draft Moffat County Fire Management Plan.

NEED FOR PROPOSED ACTION: In accordance with the National Fire Plan of 1999, public land agencies are directed to take actions to reduce hazardous fuels, especially in those areas where communities and human development are at risk from wildfire. The Little Snake Fire Management Plan identifies areas where fuels reduction treatments are desired and needed. The Moffat County Sheriff's Department and Maybell Volunteer Fire Department have expressed concern over the potential wildfire hazard in the Greystone area of Douglas Mountain due to the long response time for emergency equipment and frequent fire occurrence. The proposed action was developed to respond to these concerns and comply with the two plans. Inherent to complying with the plans is also the need to reduce fuels to help protect life, property, and natural resources. Specifically the community of Greystone, surrounding residences as well as scattered residences, cabins, and ranch buildings on Douglas Mountain are at risk from wildfire.

Currently the area in which this project is proposed is identified as a "B4" polygon. "B4" polygons support a mix of ponderosa pine with mountain shrub interspersed by sagebrush in the draws. Pinyon-juniper is found to be invading into the ponderosa pine stands. It is desirable to maintain the stand of ponderosa pine. According to the Fire Management Plan for the Northwest Colorado Fire Management Program (2003), the primary resource management objective in this area is to sustain the yield of forest products. Wildland fires are ordered to be suppressed until adequate hazardous fuels treatments have been accomplished to reduce the risk of stand-replacement fires (Fire Management Plan for the Northwest Colorado Fire Management Program, 2003). The reduction of "ladder" fuels (shrubs and young trees that provide continuous fine material from the forest floor into the crowns of dominant trees) in the 7 Springs area would create a "park-like" stand, which encourages ground fires instead of a stand-replacement crown fire. The Douglas Mountain area has been identified as a high priority area for hazardous fuels treatments due to the urban-interface with the community of Greystone, CO.

<u>PUBLIC SCOPING PROCESS</u>: The project is listed on the NEPA log on the Little Snake Field Office website: http://www.blm.gov/co/st/en/BLM\_Information/nepa/lsfo.html

**BACKGROUND**: The Douglas Mountain hazardous fuels reduction project was originally initiated in 2002 and various projects have been completed in the Douglas Mountain area since then. The 7 Springs area of Douglas Mountain has been identified for treatment by Little Snake Field Office Fire Management and Resource Staff due to the encroachment of pinyon-juniper in the ponderosa pine stands and the build-up of shrubbery and sagebrush through years of fire suppression in the area. The ponderosa pine stands in this area are of mixed age, with the oldest trees dating back 200 – 300 years. Removal of encroaching pinyon-juniper trees is essential to ensuring a healthy, mixed-age ponderosa pine stand.

### **DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:**

**NO ACTION ALTERNATIVE:** Under this alternative, hazardous fuel reduction activities would not occur.

<u>CHEMICAL TREATMENT ALTERNATIVE:</u> Using herbicides to kill woody vegetation was considered as a treatment option but dropped from further analysis because of the high volume of woody material left after treatment. Chemical treatment would not fully achieve hazardous fuels reduction objectives and visual resources would be impacted.

## **PROPOSED ACTION:**

It is proposed to reduce hazardous fuels on 534 acres in the 7 Springs area of Douglas Mt. using mechanical and prescribed fire treatments. Prior to burning, 120 acres of the 534 would be treated mechanically. Mastication is the preferred mechanical treatment method but hand thinning may also be utilized. Mechanical treatments may be performed by a contractor hired by the BLM and/or the BLM Northwest Colorado Fire Management Employees. For purposes of this document, the "operator" referred to throughout the document is the contractor or the BLM Northwest Colorado Fire Management Employees.

The overall strategy is to mechanically remove invading pinyon and juniper trees that are in close proximity to larger ponderosa pine trees in order to reduce ladder fuels that would allow fire to burn up into surrounding ponderosa trees. Following mechanical treatment, prescribed burning can be done to further reduce ground fuels. This would maintain an open ponderosa pine stand and reduce competition for new seedlings that may become established. The mortality rate among ponderosa trees greater than 10" dbh (diameter at breast height) is expected to be between 10% and 20% after burning.

Sagebrush areas would also be burned in order to reduce the chance of high intensity brush fires burning into the ponderosa pine. Fifty to eighty percent of the sagebrush would be targeted. Individual treatment methods are described below.

## Hand Thinning:

In ponderosa pine areas, all pinyon or juniper trees less than 8' tall or those that have ladder fuel potential, and brush would be cut with chainsaws. No large ponderosa trees would be cut, and only selected smaller trees would be cut. The objective is to produce a healthier stand and reduce the chance of crown fire. The slash would be placed in 4' to 6' tall piles and burned later in the fall or winter. Piles would not be placed on known cultural sites. Tree limbs within 6' of the ground would be cut from larger trees to eliminate ladder fuels which provide a path for fire to burn up into the crown of a tree.

#### Mastication:

This process utilizes a large rubber tired tractor (similar to a skidder) or smaller tracked

skidsteer with a 6'- 8' hydraulically powered mulching head attached to the front. The machine is capable of shredding trees up to 16" in diameter as well as mulching brush. It generally leaves small branches and pieces of wood from pencil size up to football size. The mulch is scattered across the surface but is heavier in the immediate vicinity of mulched tree. 40% - 70% of the pinyon/juniper would be removed from existing ponderosa stands targeted for mechanical treatment. Operations would not be allowed in muddy conditions and would only be allowed where a class III cultural survey has been completed.

#### Prescribed Fire:

Broadcast burning would be used to reduce brush and woody species including sagebrush, serviceberry, oakbrush, Utah juniper, and pinyon pine. This has the effect of changing the vegetation composition to mostly herbaceous species resulting in a lower intensity fire should one occur as compared to a brush or tree dominated site. Fire may also be used to reduce the fuel loading in the under story of a forested site, in this case ponderosa pine. The intent is to reduce ladder and ground fuels that provide a path for fire to burn up into the crown of a tree and to reduce the intensity of a ground fire, should one occur, thereby reducing the mortality rate of older trees.

Approximately 0.27 mile of handline would need to be constructed as depicted on the attached map. This would involve clearing a swath of brush approximately 10' wide and scraping a 1' -2' line down to mineral soil. On slopes greater than 20% water bars will be constructed every 20' -50' to prevent erosion in the fire line. Handline will only be constructed where a Class III cultural resource survey has been conducted.

All prescribed fire will be conducted in accordance with the State of Colorado Smoke Management Plan and MOU, and is regulated under Colorado Department of Public Health and Environment, Air Pollution Control Division. The Air Pollution Control Division reviews the proposed prescribed burn and issues an open burning permit which specifies permissible daily acreage limits and under what smoke dispersal conditions burning may occur.

Burning may occur in the spring, summer, or fall but will not be conducted between September 28 and October 11 so as to not conflict with hunting season or between May 15 and July 15 due to migratory birds. No activities will be conducted from 16 April to 30 June in elk calving areas to prevent disturbance and added stress during the calving season.

The area which would be treated with prescribed fire will be rested from livestock grazing for a minimum of two growing seasons.

**STANDARD OPERATING PROCEDURES:** The following procedures must be implemented in order achieve resource objectives of the proposed action.

CULTURAL RESOURCES: The following standard stipulations apply for this project:

- 1. The operator is responsible for informing all persons who are associated with the operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are encountered or uncovered during any project activities, the operator is to immediately stop activities in the immediate vicinity of the find and immediately contact the authorized officer (AO) at (970) 826-5000. Within five working days, the AO will inform the operator as to:
- Whether the materials appear eligible for the National Register of Historic Places;
- The mitigation measures the operator will likely have to undertake before the identified area can be used for project activities again; and
- Pursuant to 43 CFR 10.4(g) (Federal Register Notice, Monday, December 4, 1995, Vol. 60, No. 232) the holder of this authorization must notify the AO, by telephone at (970) 826-5000, and with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony.
- Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

PALEONTOLOGY: This impact is usually effectively mitigated by ceasing operations and notifying the Field Office Manager immediately upon discovery of a fossil during construction activities. An assessment of the significance is made and a plan to retrieve the fossil or the information from the fossil is developed. The proposed action could also constitute a beneficial impact to paleontological resources by increasing the chances for discovery of scientifically significant fossils.

# <u>AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES/MITIGATION MEASURES</u>

## **CRITICAL RESOURCES**

### **AIR QUALITY**

Affected Environment: Air quality in the vicinity of the project area is considered to be in compliance with the National Ambient Air Quality Standards. There are two Class 1 (visibility) areas located in Northwest Colorado. These are the Mt. Zirkel Wilderness 90 miles to the east and the Flat Tops Wilderness 75 miles to the southeast.

Environmental Consequences, Proposed Action: Prescribed and wildland fires can contribute substantial emissions of air quality pollutants including particulate matter, volatile organic compounds, and carbon monoxide. However, prescribed fires are typically smaller than uncontrolled wildfires occurring during peak burning conditions. Prescribed fires involve less combustion, and therefore less total smoke emissions, since they are typically conducted under conditions when larger fuels (>3" diameter) are not consumed. Prescribed fires are also conducted under atmospheric conditions that promote air pollutant dispersion.

The treated landscape is expected to be more resistant to an uncontrolled wildfire because of the discontinuous nature of the fuels in the area.

Landscapes treated with prescribed fire and other fuel reduction treatments are expected to cause fewer air quality impacts both in the short and the long term because of the incremental reduction of fuels and the periodic release of small amounts of air quality pollutants. Pollutant emissions released at this smaller scale are not expected to cause air quality impairment to urban areas or Class 1 areas, or if they do would be of a much shorter duration.

The proposed prescribed fire will be conducted in accordance with existing laws that protect air quality. Specifically, all fire activities must comply with the applicable air quality regulations required by FLPMA and the Clean Air Act.

Mechanical treatments proposed would not be expected to affect air quality other than localized short term dust production.

Environmental Consequences, No Action Alternative: The direct environmental consequences associated with fuels reduction activities will be absent in the no action alternative. However, in the long term it would be possible to have a substantially greater air quality impairment episode as a result of increasing the potential for large scale uncontrolled wildfires. A large fire in this area has the potential to impact air quality of urban areas and reduce visibility within the two Class 1 areas.

Mitigative Measures: None

Name of specialist and date: Gail Martinez, 10/13/09

### **FLOOD PLAINS**

Affected Environment: There are no large floodplain areas in the proposed project location.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Gail Martinez, 10/13/09

#### AREA OF CRITICAL ENVIRONMENTAL CONCERN

Affected Environment: Not present.

Environmental Consequences: Not applicable

Mitigative Measures: Not applicable

Name of specialist and date: Kimberly Miller, 10/14/09

#### **CULTURAL RESOURCES:**

Affected Environment: Cultural resources, in this region of Colorado, range from late Paleo-Indian to Historic. For a general understanding of the cultural resources in this area of Colorado, see *An Overview of Prehistoric Cultural Resources, Little Snake Resource Area, Northwestern Colorado*, Bureau of Land Management Colorado, Cultural Resources Series, Number 20, *An Isolated Empire, A History of Northwestern Colorado*, Bureau of Land Management Colorado, Cultural Resource Series, Number 2 and *Colorado Prehistory: A Context for the Northern Colorado River Basin*, Colorado Council of Professional Archaeologists.

Environmental Consequences, Proposed Action: The proposed action, 7 Springs Hazardous Fuels Reduction, has not undergone a Class III cultural resource survey. The project area will be flagged and a Class III survey will occur prior to the project commencement. Once the area is surveyed, the COR (Contracting Officer's Representative) will be notified as to any mitigation that must occur prior to the project beginning. The following standard mitigative measures (Discovery Stipulation) will be required regardless of the results of the Class III cultural resources survey.

Environmental Consequences, No Action Alternative: There would be no impact to cultural resources with the No Action Alternative.

#### Mitigative Measures:

The following standard stipulations apply for this project:

- 1. The operator is responsible for informing all persons who are associated with the operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are encountered or uncovered during any project activities, the operator is to immediately stop activities in the immediate vicinity of the find and immediately contact the authorized officer (AO) at (970) 826-5000. Within five working days, the AO will inform the operator as to:
  - Whether the materials appear eligible for the National Register of Historic Places;
  - The mitigation measures the operator will likely have to undertake before the identified area can be used for project activities again; and
  - Pursuant to 43 CFR 10.4(g) (Federal Register Notice, Monday, December 4, 1995, Vol. 60, No. 232) the holder of this authorization must notify the AO, by telephone at (970) 826-5000, and with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified

to proceed by the authorized officer.

2. If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

Name of specialist and date: Robyn Watkins Morris, 10/20/09

#### **ENVIRONMENTAL JUSTICE**

Affected Environment: The proposed action is located in an area of isolated dwellings. Ranching is the primary economic activity.

Environmental Consequences, all alternatives: The project area is relatively isolated from population centers, so no populations would be affected by physical or socioeconomic impacts of either alternative. Neither alternative would directly affect the social, cultural or economic well-being and health of Native American, minority or low-income populations.

Mitigative Measures: None

Name of specialist and date: Louise McMinn, 10/19/09

#### **INVASIVE, NONNATIVE SPECIES**

Affected Environment: Noxious and invasive weeds occur within the area of the proposed action. Primary species would include cheatgrass and yellow allysum. Other species of concern in the vicinity include white top, hound's tongue, black henbane, Canada thistle as well as other biennial thistles. The proposed action also includes potential habitat for Dalmatian toadflax, knapweed or other invasive species to establish.

Environmental Consequences, Proposed Action: The proposed action to remove encroaching trees would encourage growth of desired grass and forbs in the understory inhibiting weed establishment. The proposed action would have some potential for an increase in certain species. Overall ground disturbance from the proposed action is minimal and potential weed invasions would be minimal.

*Hand Thinning*: This method causes very little ground disturbance which typically results in little to no increase of invasive weeds. There is potential for invasive species such as cheatgrass to move in where slash piles are burned.

Mastication: Utilizing a tracked skidsteer and/or rubber tired vehicle to mulch trees with this

method causes very little ground disturbance and would be similar to hand thinning with negligible affects resulting in no increase of invasive species. Mulching the trees removes the need for burning slash piles. This method is not expected to increase the presence of weeds.

*Prescribed Fire*: This method exhibits the highest potential for invasive species establishment. Following a prescribed fire there is the potential for early seral stage species such as cheatgrass and allysum to establish. Targeting the burn to achieve removal of 50 - 80% of the sagebrush would help prevent this establishment by leaving a mosaic of desirable forbs and grasses to compete with the invasive weeds. Additionally, these desirable species would have more resources (light nutrients) available to compete with invasives. Removal of the encroaching trees prior to a controlled prescribed burn will also allow the fire to burn cooler which is beneficial to existing plant community survival. This would not be the case in the event of a wildfire without the removal of the pinyon/juniper trees.

Environmental Consequences, No Action Alternative: This alternative would have no immediate effect on the invasive species community. However, if a wildfire were to occur in the area the potential weed invasion would be high and more costly to control. Additional fuels from the trees not being removed would cause a hotter fire that would deplete the resources of established vegetation and their ability to compete with invasive species post-fire.

Mitigative Measures: None

Name of specialist and date: Christina Rhyne, 10/21/09

#### **MIGRATORY BIRDS**

Affected Environment: The sagebrush/grass habitats within the project area provides nesting and foraging habitat for a variety of avian species including and not limited to: sage thrasher, Brewer's sparrow, sage sparrow, vesper sparrow and the green tailed-towhee.

The ponderosa pine habitats within the project area provides habitat for a variety of avian species including and not limited to: Steller's jay, western bluebird, solitary vireo, western tanager, and chipping sparrow.

The pinyon/juniper habitats within the project area provides habitat for a variety of avian species including and not limited to: gray flycatcher, pinyon jay, plain titmouse, bushtit, gray vireo, black-throated gray warbler, scrub jay, Clark's nutcracker, Townsend's solitaire, mountain bluebird and American robin.

The quaking aspen habitats within the project area provides habitat for a variety of avian species including but not limited to: red-naped sapsucker, tree swallow, warbling vireo, house wren, and flammulated owl.

Environmental Consequences, Proposed Action: The small amount of quaking aspen found

within the project area has reached its climax stage, with a number of trees dead and down. The climax stage aspens that are standing provide excellent habitat for cavity nesting species. Introduction of fire into these communities would likely stimulate new growth, ensuring future aspen groves within the area, thus providing habitat for future generations of cavity nesting species. Fire would also remove the pinyon/juniper trees that are encroaching into the aspen groves.

The ponderosa pine woodlands, which comprise approximately 50% of the project area, provides nesting habitat for a number of avian species. The proposed action should not interfere with the quality of nesting habitat for such species since the mature ponderosa pine trees (which provide nesting habitat for migratory birds) found within the project area will not be disturbed. The removal of encroaching pinyon/juniper trees within the ponderosa pine stands will improve the overall habitat quality for migratory birds. Although some migratory birds may use pinyon/juniper stands of trees for foraging and nesting habitat, the over-all quality of the ponderosa pine and sagebrush/grass habitats will be improved with the removal of encroaching pinyon/juniper trees.

Environmental Consequences, No Action Alternative: Under this alternative, the woodland and sagebrush/grassland areas would continue to exist in its climax stage. These areas, in its climax stage, are susceptible to disease and there is a potential for large catastrophic wildfires. If this area becomes susceptible to either disease or a large stand replacement wildfire, the migratory bird habitat would be degraded if not destroyed entirely until the area could recover. The decadent age class of the project area does not promote new growth and healthy vigor among plants and trees, which would eventually decrease the quality of habitat for migratory birds.

Mitigative Measures: None

Name of specialist and date: Gail Martinez, 10/13/09

## NATIVE AMERICAN RELIGIOUS CONCERNS

A letter was sent to the Eastern Shoshone, Uinta and Ouray Tribal Council, Southern Ute Tribal Council, Ute Mountain Ute Tribal Council on May 26, 2009. The letter listed the FY2010 projects that the BLM would notify them on and projects that would not require notification. A follow-up phone call was performed on July 26, 2009. No comments were received (Letter on file at the Little Snake Field Office). This project requires no additional notification.

Name of specialist and date: Robyn Watkins Morris, 10/20/09

## PRIME & UNIQUE FARMLANDS

Affected Environment: No Prime and/or Unique Farmlands are present in the vicinity of the proposed project.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Gail Martinez, 10/13/09

#### **T&E SPECIES - SENSITIVE PLANTS**

Affected Environment: There are no BLM sensitive plant species within or in the vicinity of the proposed treatment.

Environmental Consequences, all alternatives: None

Mitigative Measures: None

Name of specialist and date: Hunter Seim, 10/19/09

#### **T&E SPECIES – ANIMALS**

Affected Environment: No threatened or endangered animal species or suitable habitat is known to exist in the project area.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Gail Martinez, 10/13/09

#### **T&E SPECIES – PLANTS**

Affected Environment: There are no federally listed threatened or endangered plant species within or in the vicinity of the proposed treatment.

Environmental Consequences, all alternatives: None

Mitigative Measures: None

Name of specialist and date: Hunter Seim 10/19/09

## WASTES, HAZARDOUS OR SOLID

Affected Environment: The areas involved with the proposed action are remote areas that have little influence from human activity. Currently, there are no hazardous materials present within or in the vicinity of any of the proposed project areas.

Environmental Consequences, Proposed Action: Heavy equipment, pickup trucks, ATVs, and other support vehicles would be present during project activities. Fuel, oil, and coolant are potential hazardous materials that could be introduced to the project vicinity. If a release does occur, the environment affected would be dependent on the nature and volume of material released. If there are no releases, there would be no impact on the environment. Consequences would be dependent on the volume and nature of the material released. In most every situation involving hazardous materials, there are ways to remediate the area that has been contaminated. Short-term consequences would occur, but they can be remedied, and long-term impacts would be minimal.

Environmental Consequences, No Action: There would be no impact under the No Action Alternative as no activities would occur.

Mitigative Measures: None

Name of specialist and date: Gail Martinez, 10/13/09

## **WATER QUALITY - GROUND**

Affected Environment: The area affected by the proposed action will have some ground water aquifers containing meteoric water. The ground water quality in the areas range from potable to useable in aquifers within porous formations, mostly sandstone and within fracture zones in the more indurated parts of the group.

Environmental Consequences, Proposed Action: The proposed action would not impact ground water quality. The proposed action will be conducted in accordance with existing Colorado laws for water quality. Specifically, all permit activities must comply with the applicable water quality regulations in The Colorado Water Quality Control Act, and they will be in conformance with the classifications and numeric standards for water quality established by the Colorado Water Quality Control Commission.

Environmental Consequences, No Action Alternative: There would be no effect on water quality. The conditions would stay the same. It is possible that there would be a long term negative effect as species diversity and ground cover diminishes in the event of a wildfire.

Mitigative Measures: None

Name of specialist and date: Marty O'Mara, 10/19/09

## **WATER QUALITY - SURFACE**

Affected Environment: The proposed project area is located along the northern edge of Douglas Mountain where runoff water drainage would flow southerly in ephemeral tributaries of the

Yampa River or northerly towards Rye Grass Draw which is an ephemeral tributary to the Green River. Water quality of the Yampa River needs to support Aquatic Life Warm 1, Recreation 1a, Water Supply and Agriculture. All tributaries to the Green River and this Yampa River segment need to support Aquatic Life Warm 2, Recreation 1a and Agriculture; these stream segments are designated as use protected. Water quality of the Green River needs to support Aquatic Life Cold 1, Recreation 1a, Water Supply and Agriculture.

Environmental Consequences, Proposed Action: The proposed action would have some short term effects to the water quality of ephemeral streams in the project area during times of runoff. These effects would be from the prescribed burning treatment and would result from accelerated soil erosion. Increases in sediment, nitrogen, phosphorous, and cation production are likely in the first couple of years after treatment. With the exception of sediment, these increases would be minor and short lived, returning to pre-treatment levels in a couple of years. Although increased sediment is expected to enter these ephemeral tributaries an unknown and varying portion of this sediment would be deposited and stabilized within active floodplain areas downstream. Stabilized sediments could have beneficial effects to the function of these ephemeral streams and reduce the amount of sediment transport downstream. The proposed fires would be ignited under prescribed (or favorable) conditions and would be expected to be of varying intensities creating a mosaic burn pattern. This would keep sediment and nutrient yields from increasing to harmful levels. The effects of the proposed action would be short lived and not out of the natural variability of the area.

Minimal surface disturbance would occur with the proposed mechanical treatments. Little to no effect to water quality would be expected to result from implementing the mechanical fuel reduction treatments.

In the long term, the proposed action would have a positive impact to water quality. This would be because of the decreased potential of experiencing a large scale wildfire and the expected increase in plant diversity and ground cover, resulting from the planned treatments.

Environmental Consequences, No Action Alternative: No direct effects on water quality are anticipated from selecting the No Action Alternative. Indirect negative effects could result in the short or long term period following no action, if a large wildfire occurred in the area. In this event, substantially more sediment and nutrient loading of runoff waters would likely occur and it would be derived from a larger area of the landscape.

Mitigative Measures: None

Name of specialist and date: Gail Martinez, 10/13/09

#### WETLANDS/RIPARIAN ZONES

Affected Environment: No riparian areas are known to be present on public lands within the treatment areas.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Gail Martinez, 10/13/09

## WILDERNESS, WSA, AND WILD & SCENIC RIVERS

Affected Environment: Not present.

Environmental Consequences: Not applicable

Mitigative Measures: Not applicable

Name of specialist and date: Kimberly Miller, 10/14/09

## **NON-CRITICAL ELEMENTS**

#### **FORESTRY**

Affected Environment: Forest communities involved with this project include ponderosa pine forest, pinyon-juniper woodland, and a small amount of quaking aspen. Approximately 20% of the area can be characterized as mature ponderosa pine with limited reproduction and encroaching pinyon-juniper filling the understory and spaces between ponderosa trees. Approximately 50% of the area is predominately mature ponderosa pine but has various age classes present and limited pinyon-juniper encroachment. Approximately 2% of the area is decadent aspen and the remaining 48% is sagebrush dominated. All of the area has a buildup of surface fuels due to many years of fire suppression.

The project area is at the upper elevation limit of the pinyon-juniper range. At this elevation both tree species typically slowly encroach into other community types rather that forming continuous stands.

The aspen stands in the project area are generally unhealthy due to old age and encroachment by sagebrush and common juniper. Because of this encroachment and a moderate amount of dead/down material, these stands are easier to burn than more viable stands.

The primary forest product utilized in the area is firewood although there have been past timber sales of saw log material in the surrounding area.

Environmental Consequences, Proposed Action:

#### Hand thinning

This highly selective treatment of targeting only pinyon pine, Utah juniper, brush and trees with

ladder-fuel potential within ponderosa pine stands would be beneficial to the preservation mature ponderosa stands. This treatment would positively impact these ponderosa stands by emulating many of the effects a low intensity surface fire would have. It would also allow prescribed fire or wildland fire use to occur to further maintain long term ponderosa forest health.

## **Mastication**

The effects of this treatment would be similar to those for hand thinning. The main differences are that mulched material is somewhat scattered (rather than slash piles made) which may allow for more successful prescribed burning.

#### Prescribed fire

## Ponderosa forest

Broadcast burning of understory fuels would have the effect of arresting succession, exposing natural seedbeds, and preventing large crown fires. This would help maintain healthy, open ponderosa stands that are more resistant to forest pathogens.

## Pinyon-juniper woodland

Both species are easily killed by fire through crown consumption and overheating of the cambium layer. Fire would effectively remove these species for 20 - 40 years. Burning 40 - 60 percent of the area would permit some pinyon and juniper trees to remain.

## Aspen

Prescribed burning would result in the initiation of many young trees. However, browsing by cattle, deer, and elk could limit the number of trees surviving to maturity.

Environmental Consequences, No Action: Under this alternative, no fire or other disturbances would occur. Surface and ladder fuels would continue to build up leading to decreased forest health and increasing risk of catastrophic fire that would effectively remove all trees in the area (with the possible exception of aspen). Even if fire does not occur, the increased competition for soil and water resources will lead to less vigorous trees and therefore an increased risk of forest pathogens affecting the area.

Mitigative Measures: None

Name of specialist and date: Gail Martinez, 10/13/09

#### **PALEONTOLOGY**

Affected Environment: The geologic formation at the surface is the <u>pre-Cambrian Age, Uintah Mountain Group (Yu)</u>, a resistant light to dark-red sandstone and locally gray to red silty shale, of probable marine origin. Maximum thickness is probably more than 7,000 meters. This formation has been classified a Class III formation for the potential for occurrence of scientifically significant fossils. Scientifically significant fossils are rarely found within this formation (Armstrong & Wolney, 1989). The potential for discovery of significant fossils on this location is

considered to be low.

Environmental Consequences: If any such fossils are located here, construction activities could damage the fossils and the information that could have been gained from them would be lost. The significance of this impact would depend upon the significance of the fossil.

Mitigative Measures: See Standard Operating Procedures (pg.5).

#### References:

Armstrong, Harley J and Wolney, David G., 1989, Paleontological Resources of Northwest Colorado: A Regional Analysis, Museum of Western Colorado, Grand Junction, CO, prepared for Bureau of Land Management, Vol. I of V.

Name of specialist and date: Marty O'Mara, 10/16/09

#### RANGE MANAGEMENT

Affected Environment: The proposed treatment area is contained within the West Douglas Mountain Allotment #04323. The West Douglas Mountain Allotment is permitted for 922 AUMs (Animal Units per Month) of cattle use from May 16<sup>th</sup> through October 31<sup>st</sup>. There is an existing BLM range improvement project (Gardner-Tisdel Fence Project #201365) along the eastern boundary of the project area, which consists of an allotment boundary fence. This fence was recently reconstructed.

Environmental Consequences, Proposed Action: The area which would be treated with prescribed fire will be rested from livestock grazing for a minimum of two growing seasons. The rest could be implemented without the construction of temporary fencing as the cattle do not typically use the area to be treated due to lack of water and forage and steep, rocky terrain. The permittee is agreeable to keeping the cattle off the area via riding, herding and salting.

There would be no impacts to range management unless the prescribed burn gets out of the proposed treatment area and becomes larger than intended. The proposed treatments may provide a benefit to livestock management over the long term. Opening up closing stands of ponderosa, sagebrush, pinyon-juniper, and mountain shrub communities would increase grasses and forbs that are important to livestock. All of these treatments, especially fire, would increase the density and vigor of key livestock forage species such as western wheatgrass and thickspike wheatgrass, improving the nutritive quality and availability of these species to cattle.

If the fence is damaged through the implementation of the Proposed Action, it would be repaired immediately by the BLM.

Environmental Consequences, No Action Alternative: There would be no impact to grazing operations or improvements under this alternative. The area within the West Douglas Mountain

Allotment would continue to be available for use by livestock in the short term. However, unless wildfire occurs on this allotment in a manner similar to what is planned under the Proposed Action, forage quality, abundance, and availability would decline to the point where portions of the allotment within the proposed project area become poorly suited for livestock use. Increasing ponderosa stand density, pinyon-juniper replacement of sagebrush communities, and sagebrush decadence would reduce key forage grasses and important forbs and reduce the overall grazing capacity of this allotment. Additionally, as diversity declines (a factor of climax conditions in sagebrush and pinyon-juniper communities), these areas would become less resilient to impacts from livestock grazing and more susceptible to invasion by exotic annual species such as cheatgrass when inevitable wildfires do occur.

Mitigative Measures: None

Name of specialist and date: Kathy McKinstry, 10/15/09

## **SOILS**

Affected Environment: The primary soil mapping unit within the proposed project area is the Rock outcrop-Haploborolls complex, 10 to 40 percent slopes. This mapping unit covers the woodlands portion of the project. Smaller areas of the Detra-Cortyzack complex, 1 to 12 percent slopes are within the project area and comprise the soil mapping unit found in the valleys with big sagebrush.

The Rock outcrop-Haploborolls complex mapping unit is comprised of an estimated 50 percent rock outcrop and 50 percent soil. Haploborolls and similar soils comprise about 35 percent of the soils component and these soils are typically 4 to 30-inches to bedrock, have moderately rapid permeability, very low water holding capacity and high runoff rates. The surface soil is described as a gravelly sandy loam.

The Detra-Cortyzack complex mapping unit is comprised of 50 percent Detra soils and 40 percent Cortyzack soils. Detra soils are deep (>60-inches), have moderate permeability, high water holding capacity and medium runoff rates. This soil has a deep surface horizon (19-inches) described as a fine sandy loam. Cortyzack soils are deep, have a moderately slow permeability, high water holding capacity and medium runoff rates. Cortyzack soils also have a fine sandy loam surface horizon to a typical depth of 9-inches. Both soils have sandy clay loam subsoil and/or sandy loams in the deeper profile.

Environmental Consequences, Proposed Action: The areas targeted for prescribed burning contain light to moderate fuel loading which results in lower surface temperatures and short burning duration. As a result, soil heating should not be severe enough to cause significant mortality of perennial grasses and forbs. There would be increased soil erosion for one to two seasons following burning due to more soil surface exposure. However herbaceous vegetation cover should increase above pre-burn levels after two to three years thereby increasing soil stability and infiltration and reducing soil erosion.

Any vegetation management activity that causes mechanical soil disturbance can have negative impacts to soil productivity, nutrient cycling, soil cover, and vegetation recovery. These impacts are common to any type of soil disturbance. There is a risk of compaction from the equipment used in the project, which could increase surface flows and erosion, an identified hazard in this soil type. However, if proper cover limits are maintained and fuel break construction and maintenance methods that leave an understory canopy and minimize bare ground are used, these effects would be reduced. Effects would also be reduced if the treatment is only performed on dry ground, thereby decreasing ruts and new overland flow patterns.

Although the prescribed fire treatment is likely to increase soil erosion from the project area in the short term it is considered to be at an acceptable level compared to soil erosion that would inevitably occur with a large intensely burning wildfire. The fuels reduction treatments will allow fire to be reintroduced into the ponderosa pine forests and improve the capability for wildland fires to be managed for fire use or additional use of prescribed fire to maintain the appropriate understory vegetation conditions.

Environmental Consequences, No Action Alternative: There would be no direct impacts to the soil resource if no actions are implemented. However, the threat of larger more intense fires occurring under extremely dry conditions exists if fuel reduction treatments are not implemented. The scale and duration of adverse soil effects would be much higher under the extreme burning conditions that exist for large fire occurrence.

Mitigative Measures: None

Name of specialist and date: Kathy McKinstry, 10/19/09

#### **VEGETATION**

Affected Environment: Native vegetation typically associated with the soils found in the treatment unit is bluegrass, brome, mountain mahogany, needlegrass, sagebrush and wheatgrass. pinyon pine, juniper and ponderosa pines make up the overstory.

Environmental Consequences, Proposed Action: The construction of the proposed fuel break would disturb the vegetation that comprises the understory. This disturbance would consist of crushing the vegetation through the operation of the machinery. The disturbance would be temporary in nature and the understory vegetation would be expected to recover over time. The juniper and pinyon pine comprising the overstory would be completely removed along the fuelbreak. This is the objective of the Proposed Action. Over time, it is anticipated that pinyon pine and juniper seedlings would re-establish along the fuelbreak, unless future maintenance of the fuelbreak prevents this re-establishment.

The prescribed burning portion of the Proposed Action would improve plant diversity by reducing the pinyon/juniper component and increasing the understory of perennial grasses. In this type of a fire, the shrub species would be top killed and larger branches would survive the fire. Fire would

make these shrubs more accessible to browsing animals by lowering the height of palatable growth. Removal of a portion of the sagebrush component would create additional resources (light, water, and nutrients) to become available to grasses and forbs in the understory. As a result, the grass and forb component of the community would colonize the interspaces and increase in production. This would decrease soil erosion and increase sediment holding capabilities. Additionally, the burning of vegetative litter through a prescribed burn would accelerate the nutrient cycling within the plant community.

In sagebrush and mountain shrub communities, this treatment would have the effect of maintaining and improving the shrub, forb, and grass components of shrub dominated plant communities by reducing or eliminating the increasing competition of juniper for water and nutrients. Additionally, juniper possesses strong allelopathic characteristics which strongly suppress other competing plants once the stands become established. This treatment would eliminate threats to existing shrub dominated communities by arresting juniper allelopathy.

The proposed burn objective to target 50 to 80% of the sagebrush would improve the age class distribution of the vegetation. A mosaic type burn, as proposed, is most preferable for increasing the age and species diversity of a site. Sagebrush is susceptible to kill by fire while many forbs, grasses, and shrubs are only slightly damaged or relatively unharmed. Over time (10 - 20 years) the sagebrush would begin to reestablish. This treatment would improve the ability of the site to produce usable forage for livestock and wildlife.

Environmental Consequences, No Action Alternative: Under this alternative, sagebrush, pinyon pine and juniper would continue to occupy and encroach into the area reducing total production and diversity of the plant community. Fuel loads would continue to accumulate and increase the risk for catastrophic wildfires.

Mitigative Measures: None.

Name of specialist and date: Kathy McKinstry, 10/15/09

## WILDLIFE, AQUATIC

Affected Environment: The project is located in the Green and Yampa River watersheds. There are no perennial streams located in the project area. There are two mapped springs located approximately ½ mile northwest of the project area (074-09 and 074-10), but outside of the planned project area.

Environmental Consequences, Proposed Action: The only habitat suitable for aquatic wildlife is located outside the targeted treatment areas, and the chance of impacting these areas is small. It is likely that small amphibians use the two springs in the area and the associated vegetation surrounding these springs. The effects would be minimized on these species unless the fire moved into the allowable area. The project may lead to increased run off and sediment. This effect would be minor and temporary and should not affect aquatic wildlife in the area.

Environmental Consequences, No Action Alternative: There would be no impact to aquatic wildlife with this alternative.

Mitigative Measures: None

Name of specialist and date: Gail E. Martinez, 10/13/09

## WILDLIFE, TERRESTRIAL

Affected Environment: Douglas Mountain is a diverse area, rich in wildlife and vegetation. The area provides habitat for mule deer, black bear, mountain lion, elk, blue grouse and Merriman's turkey (CDOW communication). It is also used by raptors and small non game birds and mammals. The project area is dominated with 50% ponderosa pine woodlands, encroaching pinyon/juniper woodlands and sagebrush/grasslands. The southwestern ½ of the project area is mapped as elk production area. The southern 1/3 of the project is mapped as mule deer winter range. The entire project area is mapped as Merriam's turkey production area. Although the project area is not mapped as a roosting site for Merriam's turkey, the large ponderosa pine trees found within the project area may provide excellent roosting habitat for turkeys.

Environmental Consequences, Proposed Action: The sagebrush/grass, pinyon/juniper and ponderosa pine communities of the 7 Springs area provide habitat for a variety of wildlife species. Much of the sagebrush in the area has reached climax state and reintroducing fire into the ecosystem should improve the quality of the habitat by stimulating new growth. Burning would also improve habitat diversity by creating a mosaic of vegetation in different seral stages. Common non-game bird species and small mammals that use the pinyon/juniper trees and sagebrush would lose habitat, but this effect would not be substantial. Islands of shrubs that remain intact in the area would still provide some cover and foraging areas for these species. There are no known raptor nests in the project area, but it is likely that woodlands in the area support nesting raptors. The project site is mapped as Merriam's turkey production area. The shrubs and grasses that would remain intact in the area would provide suitable turkey production habitat. The removal of pinyon/juniper trees within the area would encourage new shrub and grass growth, thus improving the production habitat for Merriam's turkeys. The thinning of ponderosa pine trees within the project area should have no effect on turkeys as long as mature (>12" Dbh) ponderosa pine trees are left intact. The southeastern ¼ of the project area is mapped as elk production area. Timing restrictions outlined in the proposed action would reduce impacts to elk. Burns conducted in the fall may conflict with the big game hunting season in the area.

Environmental Consequences, No Action Alternative: There would be no direct impact to wildlife if no treatments are done, however the threat of large wildfires occurring under dry conditions exists if nothing is done. The impacts to wildlife would be greater if a catastrophic wildfire burns large areas.

Mitigative Measures: None

Name of specialist and date: Gail E. Martinez, 10/13/09

**OTHER NON-CRITICAL ELEMENTS:** For the following elements, those brought forward for analysis will be formatted as shown above.

	NA or Not	Applicable or	Applicable & Present and
Non-Critical Element	Present	Present, No Impact	Brought Forward for Analysis
Fluid Minerals		EMO 10/16/09	
Forest Management		LIVIO 10/10/07	See Forest
Totest Management			Management
Hydrology/Ground		EMO 10/16/09	
Hydrology/Surface		GEM 10/13/09	
Paleontology			See Paleontology
Range Management			See Range
			Management
Realty Authorizations		LM 10/19/09	
Recreation/Travel Mgmt		KMM 10/14/09	
Socio-Economics		LM 10/19/09	
Solid Minerals	GEM		
	10/13/09		
Visual Resources		KMM 10/14/09	
Wild Horse & Burro	KLM		
Mgmt	10/15/09		

<u>CUMULATIVE IMPACTS SUMMARY</u>: The 7 Springs area of Douglas Mountain is used by many people for hunting, camping, and antler "hunting". This area is also utilized for livestock grazing. The northernmost boundary of the project area is Douglas Mountain Boulevard (County Road 116), the main thoroughfare that runs along the ridgeline of Douglas Mountain. This road receives regular traffic by local residents, recreationists and ranchers.

The Douglas Mountain Hazardous Fuels Reduction project incorporated a section of the Douglas Mountain Boulevard (Moffat County Road # 116). This project, named "Boulevard Fuel Break", involved treating a 100 foot wide strip on both sides of County Rd. 116 from the intersection of County Rd. 10 west 9 miles to the Five Springs prescribed burn project (approximately 230 acres). The vegetation along the road was thinned to decrease the potential of a wildfire spreading to the opposite side of the road. The objective of producing a healthier stand and reducing the chance of a wildfire burning through the tree crowns is the same in both the Boulevard Fuel Break Project and the 7 Springs Project. The Boulevard Fuel Break project was implemented in the last 5 years.

Other fuel reduction projects have been implemented in the Douglas Mountain area within the

last 5 years. Projects included treatment of sagebrush by mechanical and prescribed fire methods and removal of encroaching pinyon and juniper trees by mechanical and prescribed fire methods. Total acreage of these projects totaled approximately 5000 acres (50 - 80 % treated) treated by prescribed fire and 450 acres treated by mechanical methods.

In June of 2006, the area to the north of Douglas Mountain was impacted by a wildfire which burned approximately 3,380 acres of sagebrush, grass and pinyon/juniper woodlands. The proposed action is compatible with other uses, both historic and present, and would not add any new or detrimental impacts to those already present.

### **STANDARDS**

An interdisciplinary team of BLM employees visited the Douglas Mountain Landscape in the Little Snake Field Office (LSFO) jurisdiction over five days in June, 2004, to assess whether or not the five Colorado Public Land Health Standards were being met. A total of 20 sites were visited within the landscape and described via the site assessment forms.

The project area is within the administrative boundaries of the West Douglas Mountain Allotment which was included in the Douglas Mountain Landscape Land Health Assessment, and had five points of assessment completed. In each of the five Assessment Sites, all standards were met with the exception of Assessment Site DM3. The native species portion of the standards was not met at this site.

PLANT AND ANIMAL COMMUNITY (animal) STANDARD: The West Douglas Mountain Allotment and the Douglas Mountain Landscape provide productive habitat for a variety of mammalian and avian species. In 2004, all sites in the West Douglas Mountain Allotment met this standard and this standard was met on the landscape scale. The proposed action should aid in continuing to meet this standard because it would return more decadent areas to a younger, healthier and more productive state. The greater potential under this alternative for creating landscapes composed of several plant communities that vary in successional stages and patterns would contribute to meeting this standard.

Name of specialist and date: Gail E. Martinez, 10/13/09

## SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (animal)

**STANDARD:** There are no known threatened or endangered animals or suitable habitat for such in or near the affected environment. The standard does not apply.

Name of specialist and date: Gail E. Martinez, 10/13/09

**PLANT AND ANIMAL COMMUNITY (plant) STANDARD:** This standard was not met on the landscape scale in 2004. Four out of the five assessment points in the West Douglas Mountain Allotment met this standard. The Proposed Action would reduce pinyon-juniper

biomass and arrest its expansion into ponderosa stands, encouraging maintenance of healthier, fire resistant ponderosa trees and maintaining healthier, more diverse areas of the sagebrush-perennial grass understory. Reducing decadent sagebrush would foster greater age class diversity of sagebrush needed to maintain a diversity of grass and forb species and fire in mountain shrub would increase desirable species and improve its importance to wildlife. The Proposed Action would help to move this area toward meeting this standard.

Name of specialist and date: Gail Martinez, 10/13/09

## **SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (plant)**

**STANDARD:** There are no federally listed threatened or endangered or BLM sensitive plant species within or in the vicinity of the proposed treatment. This standard does not apply.

Name of specialist and date: Hunter Seim, 10/19/09

**RIPARIAN SYSTEMS STANDARD:** There are no riparian systems present within or near the project area. This standard does not apply.

Name of specialist and date: Gail E. Martinez, 10/13/09

**WATER QUALITY STANDARD:** There is not a quantitative data record sufficient to indicate non-compliance with these criteria. However, based on examination of the other upland soil and plant standards in the 2004 assessment summary, plus the absence of riparian systems, there is no reason to suspect water quality impairment with implementation of this project.

Name of specialist and date: Gail E. Martinez, 10/13/09

**UPLAND SOILS STANDARD:** The 2004 assessment concluded this standard is being met on the landscape scale, and at all assessment sites within the West Douglas Mountain Allotment. The project may cause some short term soil instability on the area targeted for prescribed burning and would not contribute to excessive bare ground in the West Douglas Mountain Allotment. This standard would continue to be met with project implementation.

Name of specialist and date: Gail E. Martinez, 10/13/09

<u>PERSONS/AGENCIES CONSULTED</u>: Uintah and Ouray Tribal Council, Colorado Native American Commission, Colorado State Historic Preservation Office.

**ATTACHMENTS:** 1. 7 Springs Project Map illustrating the project area, specifically illustrating the areas to be treated mechanically and the area to be treated with prescribed fire.

## **SIGNATURE OF PREPARER:**

**DATE SIGNED:** 

SIGNATURE OF ENVIRONMENTAL REVIEWER:

**DATE SIGNED:** 

#### **FONSI**

The environmental assessment, analyzing the environmental effects of the proposed action, has been reviewed. With the implementation of the attached mitigation measures there is a <u>finding of no significant impact</u> on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

- Beneficial, adverse, direct, indirect, and cumulative environmental impacts have been disclosed in the EA. Analysis indicated no significant impacts on society as a whole, the affected region, the affected interests or the locality. The physical and biological effects are limited to the Little Snake Resource Area and adjacent land.
- 2. Public health and safety would not be adversely impacted. There are no known or anticipated concerns with project waste or hazardous materials.
- 3. There would be no adverse impacts to regional or local air quality, prime or unique farmlands, known paleontological resources on public land within the area, wetlands, floodplain, areas with unique characteristics, ecologically critical areas or designated Areas of Critical Environmental Concern.
- 4. There are no highly controversial effects on the environment.
- 5. There are no effects that are highly uncertain or involve unique or unknown risk. Sufficient information on risk is available based on information in the EA and other past actions of a similar nature.
- 6. This alternative does not set a precedent for other actions that may be implemented in the future to meet the goals and objectives of adopted Federal, State or local natural resource related plans, policies or programs.
- 7. No cumulative impacts related to other actions that would have a significant adverse impact were identified or are anticipated.
- 8. Based on previous and ongoing cultural surveys, and through mitigation by avoidance, no adverse impacts to cultural resources were identified or anticipated. There are no known American Indian religious concerns or persons or groups who might be disproportionately and adversely affected as anticipated by the Environmental Justice Policy.
- 9. No adverse impacts to any threatened or endangered species or their habitat that was determined to be critical under the Endangered Species Act were identified. If, at a future time, there could be the potential for adverse impacts, treatments would be modified or mitigated not to have an adverse effect or new analysis would be conducted.
- 10. This alternative is in compliance with relevant Federal, State, and local laws, regulations, and requirements for the protection of the environment.

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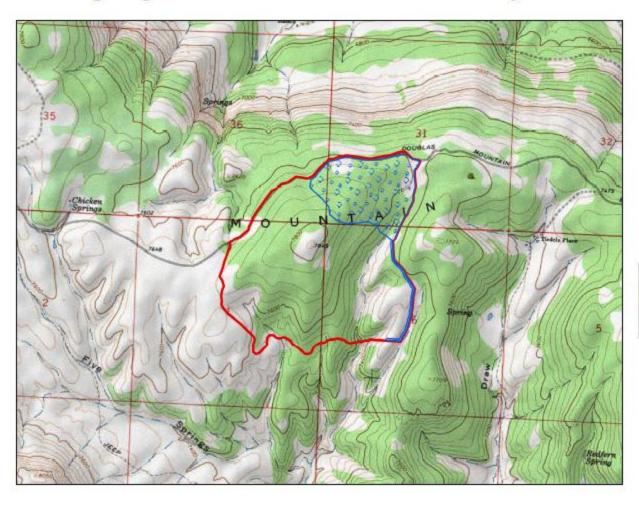
**DATE SIGNED**:

0.35

0.7

## 7 Springs Hazardous Fuels Reduction Project

### Mechanical Treatment (120 acres) Prescribed Fire (534 acres)



1.4 Miles



T8NR102W Section 36 T8N R101W Section 31 T7NR102W Section 1 T7NR101W Section 6



